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HIGHLIGHTS

A program that would set all U.S. farm prices at 100 percent of parity and could effectively control marketings at levels which would clear at those prices would have significant impacts on foreign trade, domestic farm production, farm incomes, and other sectors of our domestic economy. In this analysis these effects are estimated by evaluating world import demand and U.S. domestic retail demand for farm products under parity prices for the period 1978/79 to 1982/83. The results are traced through agriculture and other sectors of the economy. Estimated impacts are:

1. Retail food prices rising about 20 percent from fourth quarter 1977 to fourth quarter 1978, compared to 4-6 percent currently projected. After the initial shock, the increases in food prices return to an annual rate of 6-7 percent.
2. By 1979, in response to higher retail prices, per capita food consumption dropping well below the high levels of the last 2 years, with red meats showing the greatest decline.
3. Retail beef, pork, and broiler prices rising 50, 40, and 30 percent from 1977 to 1979. Per capita beef consumption falling from 126 pounds in 1977 to 95 pounds in 1979. Based on consumption in recent years, about 70 percent of slaughter is assumed to be fed beef, 30 percent lean beef. Pork consumption could fall to 55 pounds (from 62 in 1977), but broiler consumption could rise from 41 pounds in 1977 to 48 pounds in 1979 due to the relatively smaller price increase. By 1982, beef and broiler consumption increasing to 101 and 53 pounds, respectively, while pork consumption holds at 56 pounds.
4. With fed cattle prices at parity, cattle feeders could use parity-priced feed grains and concentrates at current rates and cover all costs including purchase of feeder cattle at parity price. Hog and broiler producers would realize a few cents per pound above full costs. Cattlemen could further minimize the costs of feeding beef animals through minimal use of grain at the end of the feeding period. A critical assumption is the type of feeding programs beef producers would adopt. In this analysis, it is assumed that a high proportion of beef animals would continue to be fed in commercial feedlots. Under such a feeding program, domestic feed use drops by 9 percent in 1978/79 and then increases about 2 percent per year. The reduction would be considerably greater if commercial feedlot operators reacted as in 1974/75.

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Prepared by the Economics, Statistics, and Cooperatives Service

5. In 1978/79, the quantity of U.S. exports is about 13.5 million metric tons less than 1977/78 quantities due to increased production of other exporters and reduced purchases by importers in response to the higher prices. However, the value of U.S. exports is as much as \$7.5 billion more the first year. By 1982/83, value of exports is almost \$10.0 billion above 1977/78.
6. Compared with 1977/78, wheat exports by 1981/82 down by 30 percent, feed grain exports off 34 percent, rice exports 45 percent lower, and soybean exports reduced about 4 percent.
7. An equivalent of nearly 75 million acres idled by 1982 to bring crop supplies in line with expected domestic demand at parity levels.
8. Realized net farm income about \$20 billion annually above current levels.
9. Much of the gains in income from 100 percent parity pricing accrues to the present owners of land since share and cash rental arrangements adjust over time and since less than half the cropland acres are farmed by owner-operators.
10. Farmland values rising 12 percent or more annually, to \$955 billion by 1983, 75 percent above this year--resulting from rapid capitalization of the value of marketing quotas into the price of land.
11. While the number of farms continues to decline, the rate of decline slackens and, in 1982, about 65,000 or 3 percent more farms than under current programs.
12. At the end of 2 years, overall real growth rate of the economy about 1/2 percentage point less with parity pricing than under present programs, and unemployment up by less than 1/2 percentage point. These changes result from the transfer of money from the large number of food consumers to a relatively small number of agricultural producers through parity pricing.

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Leaders of the American Agriculture Movement (AAM) have proposed that prices of agricultural commodities be maintained by law at 100 percent of parity. This paper is an analysis of their proposal. It examines the impacts, through 1982, of parity price levels on exports, domestic agriculture, and the general economy. The principal assumptions were specified jointly by designated representatives of the AAM and the Economics, Statistics, and Cooperatives Service (ESCS) in late January 1978. These are:

1. Prices of all farm commodities would be protected at price levels between 100 and 115 percent of parity--livestock as well as grains, fibers, fruits, and vegetables. Unlike current programs, AAM's proposal would not rely on Government loans, purchases, or set-aside programs to achieve desired prices. Instead, legislation would be passed making the sale, purchase, or trading of any agricultural commodity illegal at less than the established level.
2. Under AAM's plan, Congress would legislate a requirement that all farm goods must sell at 100 percent of parity starting October 1, 1978. Thereafter, prices would be adjusted in response to changes in a modified version of the Prices Paid Index. Feed, seed, and feeder cattle--three items usually included in that Index--would be omitted. AAM spokesmen felt that because these commodities are produced by farmers and sold to other farmers, their inclusion in the study's calculations would lead to unacceptable distortions. Feed costs, for example, would be counted twice--once as income and once as an expense. Without some adjustment for such duplications, price escalations would appear. Hence, the decision to exclude these items. Selected parity prices using this adjusted procedure are presented in table 1.

Table 1--Estimated prices at 100 percent parity

Item	Unit	Jan. 15, 1978 actual	Jan. 1978 parity	Oct. 1978 parity	Oct. 1979 parity	Oct. 1980 parity	Oct. 1981 parity	Oct. 1982 parity
Livestock:								
Cattle	\$/cwt.	37.20	59.20	60.90	64.90	69.40	74.30	79.65
Hogs	\$/cwt.	43.90	58.00	59.60	63.50	67.90	72.70	77.93
Chicken	¢/lb.	22.8	35.3	36.3	38.7	41.4	44.3	47.5
Milk	\$/cwt.	10.30	13.40	13.8	14.7	15.7	16.8	18.0
Crops:								
Corn	\$/bu.	1.96	3.49	3.59	3.83	4.09	4.38	4.70
Wheat	\$/bu.	2.54	5.00	5.14	5.48	5.86	6.27	6.72
Rice	\$/cwt.	10.70	14.50	14.90	15.89	16.99	18.18	19.49
Soybeans	\$/bu.	5.63	8.26	8.49	9.05	9.65	10.35	11.10
Upland cotton	¢/lb.	47.8	85.4	87.8	93.6	100.0	107.0	114.7

3. Farmers would be permitted to produce unlimited quantities of any agricultural commodity. But actual sales would be controlled through the use of marketing quotas and certificates. Farmers would be responsible for storing, unsubsidized, any surplus production.
4. Quotas would be based upon anticipated demand as projected by a National Agricultural Board of producer representatives.
5. Farmers would be allocated marketing quotas on the basis of their production histories, with quotas tied to the land or farm.
6. Marketing quotas could be filled with either current or stored production.
7. No farm good would be exported at less than parity prices.
8. Agricultural imports that compete with domestically produced farm goods would not be sold for less than 110 percent of the parity price.
9. To protect consumers, prices would not be permitted to rise above 115 percent of parity.
10. The Government could acquire strategic reserves through purchases on the open market, but would not be permitted to sell these reserves for less than 115 percent of parity.

The Analysis

Increasing farm prices to 100 percent of parity results in increased domestic food prices, lower consumption, and reduced exports. These adjustments in turn lead to increased farm income, general reduction in the level of farming activity, relative shifts among the commodity sectors, and adjustments in the general economy. Specific impacts for several key elements are as follows:

Food prices: Retail food prices rise about 20 percent from the fourth quarter 1977 to fourth quarter 1978, reflecting increases of a little over 50 percent for the farm value of domestic foods, about 8 percent for farm-retail spreads, and about 3 percent for average prices of imported foods and fish (table 2). Current projections for fourth quarter 1978, in the absence of a 100 percent parity program, are about 4-6 percent for all food with farm value up 2 or 3 percent, spreads up about 6 percent, and average prices for imported foods and fish about unchanged from a year earlier. Food prices beyond 1978 under 100 percent of parity would be expected to rise at an annual rate of 6-7 percent with parity prices for farm commodities as well as marketing spreads rising about in line with the overall inflation rate.

Table 2--Estimated indices of U.S. food prices under 100 percent of parity

Item	1977	1978	1979	1980	1981	1982
	(Fourth quarter)					
All food <u>1/</u>	195	234	248	265	283	302
Percent change <u>2/</u>	7.6	20.0	6.0	6.8	6.8	6.7
Food away from home <u>1/</u>	205	233	248	265	284	304
Percent change <u>2/</u>	8.0	13.7	6.4	6.8	7.2	7.0
Food at home <u>1/</u>	193	234	248	264	282	301
Percent change <u>2/</u>	7.6	21.2	6.0	6.4	6.8	6.7
Imports and fish <u>1/</u>	289	298	312	328	354	381
Percent change <u>2/</u>	27.9	3.1	4.7	5.1	7.9	7.6
Domestic farm foods <u>1/</u>	181	226	240	256	273	291
Percent change <u>2/</u>	3.0	24.8	6.3	6.8	6.5	6.7
Farm value <u>1/</u>	180	273	291	310	332	356
Percent change <u>2/</u>	6.6	51.1	6.6	6.9	7.1	7.2
Farm-retail spreads <u>1/</u>	181	196	208	222	235	250
Percent change <u>2/</u>	2.6	8.2	6.1	6.8	6.0	6.4
Farmer's share of retail cost (percent)	39	47	47	47	47	47

1/ Index, 1967 = 100.

2/ Percent change from year earlier level.

Food consumption: Per capita food consumption drops well below the high levels of the past 2 years by 1979 in response to the higher prices. Although the total poundage of food consumed declines only modestly, reductions in the higher valued red meat items pull the consumption index to the lowest level since the mid-1960's. Red meats show the largest decline, offset to some extent by increases for poultry, fish, fresh vegetables, and cereal products as consumers attempt to stretch their food dollars. Some recovery in per capita food consumption occurs after 1979 as consumer incomes again increase faster than food prices.

Table 3--Estimated indices of U.S. food consumption under 100 percent of parity

Item	1977	1978	1979	1980	1981	1982
	Index, 1967 = 100					
Total food	104.9	103.7	99.7	100.6	101.0	101.7
Animal products	103.9	101.8	94.5	95.8	96.4	97.5
Crop products	106.0	106.0	105.9	106.4	106.5	106.7

The indicated decline in the food consumption index in response to higher food prices probably would not have a significant adverse impact on the nutritional well-being of the U.S. population. In fact, the shifts away from meats move diets toward more carbohydrates relative to fats. Current levels of food availability are well above minimum requirements for major nutrients and a decline in consumption of the magnitude indicated under parity pricing should pose no problems in the aggregate. However, the impacts may well be more severe on low income or fixed income families. Partially offsetting this, the level and cost of Government food aid for the food stamp and the child feeding programs such as school lunch and breakfast would increase by over \$1.5 billion in fiscal year 1979.

Food expenditures: Total personal consumption expenditures for food would rise sharply in late 1978 and 1979 reflecting the increases in food prices which are only partially offset by lower rates of per capita food consumption (table 4). Consumer expenditures for U.S. farm foods rise more in percentage terms than total food expenditures since more of the price change is associated with these foods.

Table 4--Estimated expenditures for food under 100 percent of parity

Item	1977	1978	1979	1980	1981	1982
	<u>Billion dollars</u>					
Personal consumption expenditures -- all food	218	236	265	286	309	334
U.S. farm foods:						
Consumer expenditures	180	193	228	246	266	284
Farm value	56	66	94	101	109	115
Marketing bill	124	127	134	145	157	169

Livestock production and prices: Under the quota program, livestock production declines in line with consumption at the higher prices (table 5). Production of beef, pork, and milk falls while chicken production rises. For beef, in particular, the potential excess supply of animals presents a significant adjustment problem.

Consumer demand for fed versus nonfed beef is difficult to assess since consumption data are based on the production mix. In 1978, fed cattle slaughter is expected to account for about 70 percent of total slaughter. This would also be near the average for the past decade. This slaughter mix is assumed in estimating domestic feed use under parity conditions. This is a critical assumption in the analysis. If greater use of available land for forages, with consequent reductions in fed beef, should prevail, domestic feed use would drop substantially below levels estimated in this analysis.

Table 5--Estimated retail prices and per capita consumption patterns with production requirements for beef, pork, chicken, and milk under 100 percent of parity

Item	Unit	1977	1978	1979	1980	1981	1982
Beef:							
Production	:Bil. lb.:	25.3	24.1	21.1	21.8	22.2	22.4
Per cap. consumption	: lb.:	126	117	95	97	98	99
Farm price	: \$/cwt.:	34.5	49.0	60.9	64.9	69.4	74.3
Retail price	: ¢/lb.:	138.2	154	209	220	235	247
Pork:							
Production	:Bil. lb.:	13.3	13.0	12.2	12.2	12.6	12.7
Per cap. consumption	: lb.:	62	63	55	55	56	56
Farm price	: \$/cwt.:	40.0	45.0	59.6	63.5	67.9	72.7
Retail price	: ¢/lb.:	125.5	139	179	191	203	216
Chicken:							
Production	:Bil. lb.:	9.3	9.9	10.7	11.2	11.6	12.1
Per cap. consumption	: lb.:	41.3	43.0	48.0	49.5	51.0	53.0
Farm price	: ¢/lb.:	23.5	22.0	36.9	39.4	42.1	45.1
Retail price	: ¢/lb.:	60.1	58.0	77.6	82.4	88.0	94.0
Milk:							
Production	:Bil. lb.:	123.0	120.7	116.1	117.0	118.0	118.9
Per cap. consumption	: lb.:	552	543	521	521	521	521
Farm price	: \$/cwt.:	10.72	11.65	14.00	14.95	16.00	17.10
Retail price	:	:	:	:	:	:	:
dairy products	:1967=100:	173.9	190	224	239	255	271
Total production of beef, pork, and chicken:	:Bil. lb.:	47.9	43.2	44.7	46.0	46.7	47.9

Domestic feed use: Feed demand is derived from the level of activity in the livestock and poultry sectors. Therefore, the retail demand for livestock and livestock products, along with the mix of fed and nonfed beef, becomes the main determinants for feed use. With livestock prices at parity, retail meat prices rise to a level where the quantity of meat consumed drops substantially. This results in a lower demand for feed, even with a continuing high proportion of fed beef as assumed in this analysis.

Budget analysis shows that cattle feeding would still be profitable with feed grains and protein supplement prices at parity. However, cattlemen could minimize costs by keeping feeder animals on grass until 750-800 pounds and then adding 250-300 pounds using a concentrate ration. This would be true for both farm and commercial feeders. On the other hand, about 30 percent of commercial slaughter would probably need to be nonfed slaughter to meet the demand for hamburger and other lean beef. This would be near the slaughter mix expected for 1978.

Budget analysis also shows that hog and broiler producers would make several cents per pound "pure" profit above full costs.

The anticipated levels of livestock and poultry feeding with parity prices, assuming the high percentage of beef animals would continue to be grain fed, result in a 9-percent drop in feed use in 1978/79. After this sharp adjustment, feed use increases about 2 percent per year.

Exports: The volume of exports declines as foreign consumers adjust their consumption and production patterns and foreign competitors expand their production. The initial impact could be as much as a 13-percent reduction in overall volume--occurring in 1978/79 (table 6). The following year, exports could drop another 13 percent. The decline could stop in 1981/82 and begin to expand by 1982/83.

Table 6--Export volume and value under 100 percent of parity prices 1/

Year	Volume	Change	Value	Change
	Thous. tons	Percent	Mil. dollars	Percent
1974/75	84,876		21,854	
1975/76	104,307	+23	22,760	+4
1976/77	99,690	-4	24,013	+6
1977/78	107,700	+8	22,000-24,000	<u>2/</u> -6
1978/79	94,170	-13	30,134	<u>2/</u> +34
1979/80	81,650	-13	28,448	-6
1980/81	75,840	-7	28,829	+1
1981/82	74,890	-1	29,978	+4
1982/83	78,600	+5	32,423	+8

1/ Includes wheat, rice, feed grains, soybeans, soybean meal, soybean oil, cotton, and tobacco.

2/ Percentage changes are based on export value of \$22.5 billion.

The value of exports increases, even with the reduced volume, because of the higher prices--perhaps to \$32.4 billion by 1982/83, about \$10 billion over the 1977/78 level.

Raising the wheat and corn prices to parity implies a wheat-feed grain price ratio around 1.4, well above the 1.0-1.1 levels in recent months. This would tend to increase wheat production relative to feed grain production in Canada, Australia, and Argentina. However, that shift probably would be limited since current support price ratios are in the 1.25-1.35 range in Canada, Australia, and Argentina.

On the consumption side, the higher ratios probably would not affect food use of wheat due to the slowness of changing tastes. However, feed use of wheat would be cut drastically in Canada, Eastern Europe, and the United States where these price ratios would be effective. Internal pricing systems such as are common in the European Community and the Soviet Union, which account for 75 percent of world feed use of wheat, would limit the impact.

Wheat exports fall by about 2.5 million tons in 1978/79, then to an annual level of about 21 to 22 million tons, compared with about 30 million tons in 1977/78 (table 7). Our overseas markets shift decisively to those suppliers that are able to sell below the U.S. price. Also, little if any wheat is likely to be exported for feed since wheat could only be offered at prices well above feed grains.

Some production increases are stimulated among importing countries, although natural constraints and already high domestic support prices limit this increase. India and Turkey are encouraged to continue programs for high yielding wheat varieties which have permitted them to export wheat. In accordance with the U.S.-USSR grain agreement, the USSR maintains annual imports from the United States of 3 million tons through 1980/81.

Table 7--Volume of U.S. agricultural exports under 100 percent of parity prices

Commodity	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83
			<u>Million metric tons</u>				
Wheat and products	25.8	29.9	27.4	22.5	21.0	21.0	22.0
Feed grains	50.6	51.6	45.0	38.0	34.0	34.0	36.0
Rice	2.2	2.2	2.2	1.4	1.2	1.2	1.2
Soybeans	15.3	16.6	15.7	15.8	15.9	15.9	16.4
Soybean meal	4.1	4.3	2.7	2.6	2.4	2.0	2.3
			<u>Million bales</u>				
Cotton, including linters	4.8	4.7	3.4	1.8	1.4	1.3	1.0

Wheat production picks up in the major exporting countries where production costs are well below U.S. parity levels. Combined wheat exports from Canada, Australia, and Argentina could be expected to increase about 20 percent (7 million tons) during the period 1979/83. Transportation, handling, and port facilities in these countries tend to constrain export flows.

Rice exports drop to a level of 1.2 million tons by 1982/83 compared with 2.2 million tons in 1977/78, as higher prices would provide production incentives to other exporters as well as importing countries (table 7). Also, there would likely be some reductions in consumption, particularly in major importing countries. Thus, there would likely be increased exports from the Asian suppliers. The People's Republic of China would likely be more active as a rice supplier.

Feed grain exports drop to around 34 million tons by 1981/82 with expansion again expected in 1982/83 and beyond (table 7). This would be a loss of about 17 million tons annually from the record 1977/78 level of 51.6 million tons. Part of the reduction is due to recovery in production from the short crops in Europe in 1976 and the Soviet Union in 1977. But there would be adjustments in some countries because of less favorable feeding margins and in others because of budgetary constraints or the need to conserve foreign exchange.

West European coarse grain consumption could actually rise because of increased price advantage of grains relative to protein meals and other nongrain feeds. But Japanese feed grain use would decline because of unfavorable feed/livestock price ratios. The higher grain prices under parity seriously affect the balance of payments and foreign exchange position of the Soviet Union. Thus, both Soviet coarse grain consumption and stock levels decline from the levels projected under current conditions. As a result, Soviet imports of coarse grains during the period 1979/80-1981/82 might average less than half the 8.0 million tons level that is currently projected. However, by 1982/83, rising feed consumption relative to production again expands Soviet imports. U.S. exports to Eastern Europe also decrease as the region's total imports are cut back to save foreign exchange.

Soybean exports remain at about 16 million tons during 1978/79-1982/83, bringing to a halt the long-term uptrend and contrasts with an expected increase of about 3 million tons under current conditions (table 7). Since there is an incentive for European crushers to utilize existing capacity and competing exporters continue to push exports of products, U.S. meal exports drop by 1982/83 to about half the 4.3 million tons level of 1977/78.

EC consumption of soybean meal relative to grains and competing protein feedstuffs declines. The higher soybean prices are reflected in internal EC prices while the increase in feed grain prices is not since EC grain prices are supported above U.S. parity levels. Thus, the price of soybean meal rises relative to grains and EC farmers shift to use of relatively more grains.

U.S. soybean exports to Japan decline. During the first year, worsening of the feed/livestock price ratio reduces the demand for feedstuffs, and Japan turns to alternate suppliers. With a continuation of present policies and price levels, Japanese soybean imports are expected to increase from 3.6 million tons in 1976/77 to about 4.4 million in 1982/83. If a parity program were instituted, imports could drop to about 4.0 million tons in 1982/83.

A reduction in total imports and a shift to other suppliers are expected also from other importers. Soviet soybean imports remain well below current projections. East Europe's total import requirements, as well as the U.S. market share, are reduced.

Brazilian soybean, soybean meal, and soybean oil exports which were already expected to expand rapidly during the next 5 years get an additional boost from the U.S. parity increases. With corn and soybean yields roughly equal, parity prices favor soybean production; however, corn production also increases to avoid the weed and disease problem associated with continuous soybean plantings. Brazilian wheat production has generally not responded to current high support prices, so its production may not be stimulated by parity prices. The Brazilian Government prefers to export meal and oil in lieu of raw soybeans; therefore, their meal and oil exports grow more rapidly. A U.S. parity program also results in increased soybean production in Argentina by 1982/83.

Cotton exports average around 1.5 million bales compared with 4.8 million bales in 1976/77 (table 7). Increased competition arises in two areas. Other cotton exporting countries have the incentive to expand production and exports. In Mexico, cotton production becomes more competitive with other crops--and production increases. Production increases also may be expected in Pakistan and Western Africa. Higher world cotton prices increase the demand for manmade fibers. Current over-capacity in that industry enables immediate expansion of output.

Japan's textile industry is in a severe recession, and higher raw material prices aggravate its problems. Current projections show a decline of almost 20 percent in U.S. exports to Japan by 1982/83 from the 1976/77 level. If the U.S. parity programs were implemented, shipments to Japan could drop by more than half from 1976/77 levels.

Sugar: High fructose corn syrup can be sold profitably at prices significantly below projected parity sugar prices. Under the parity program rapid gains occur in corn sweetener production which lead to a contraction in sugar imports.

Cost increases to consumers and industrial users are limited to an extent by the substitution of lower priced HFCS for sugar. With stringent import restraints, principal losers in both a short-run and particularly the long-run context are the U.S. cane sugar refiners and foreign suppliers of raw sugar to U.S. refiners. The anticipated decline in import demand is of such a magnitude that the International Sugar Agreement's ability to stabilize world sugar prices would be jeopardized.

Farm income: Income to farmers increases immediately by more than \$20 billion, although in constant dollars the high incomes in 1979 still are less than the record set in 1973 (table 8).

Table 8--Estimated realized farm income under 100 percent of parity prices

Item	1977	1978	1979	1980	1981	1982
	<u>Billion dollars</u>					
Gross income:						
Livestock	47.4	54.2	68.1	73.5	80.2	88.6
Crops	47.6	54.3	1/67.3	70.5	71.0	77.4
Total	95.0	108.5	135.4	144.0	151.2	166.0
Other	9.3	9.8	10.8	11.7	12.6	13.8
Total	106.1	118.3	146.2	155.7	163.8	179.8
Production expenses	85.7	94.4	105.0	114.0	122.2	132.8
Realized net (current \$)	20.4	23.9	41.2	41.7	41.6	47.0
(1972 \$)	14.5	15.9	26.1	24.5	23.1	24.5

1/ Crop production would be \$6.0 billion more, all of which is added to storage. Part of this would be counted in 1980 receipts.

The jump in realized net income between 1981 and 1982, apparent in the figures above showing current dollars, stems from increased receipts. Pork and beef production increases after 1981. Marginal improvements are evident in wheat and soybean production along with stronger increases in corn production.

By 1982, production expenses increase by over \$47 billion, due primarily to higher prices paid for feed and livestock purchases and to higher storage costs, property taxes, and depreciation on structures.

In constant dollars, however, the income gains between 1981 and 1982 are minimal. Farm income in 1982 is the same as in 1980, and the 3-year constant dollar average from 1980 through 1982 about equals income in 1974.

Farm assets and debt: With 100 percent parity for all commodities, farm asset values reach \$1,281 billion by 1983, with the value of farmland rising 12 percent or more annually to \$955 billion--75 percent above this year (table 9). But farm debt rises to \$232 billion, about 93 percent above current figures, due largely to purchases of land, buildings and equipment. The debt/equity ratio rises from its current level of 19.7 percent to 22.1 percent, as debt grows faster than assets.

Table 9--U.S. farm balance sheet, 1978-1983, under 100 percent of parity estimates

Item	Jan. 1, 1978 ^{1/}	Jan. 1, 1983	Percent change
	---Billion dollars---		Percent
Physical assets:			
Real estate assets	546.9	955.0	74.6
Nonreal estate assets	149.6	285.5	92.9
Financial assets	34.7	40.3	16.1
Total assets	731.2	1,280.8	75.5
Liabilities:			
Real estate debt	64.5	126.0	95.3
Nonreal estate debt	^{2/} 55.8	105.6	89.2
Total debt	120.3	231.6	92.5
Equity	610.9	1,049.2	72.2
		Percent	
Debt/equity ratio	19.7	22.1	12.2

^{1/} Preliminary estimate.

^{2/} Includes CCC loans outstanding.

Land values: With sharply higher farm earnings, farmland values could rise by 12 to 14.5 percent per year over the next 5 years as increased returns are capitalized into land value.

The rise in value is tempered because increases in the value of land planted to specific commodities are offset by a sharp increase in the number of idle acres, and, therefore, nonproductive acres. Because quotas are tied to specific tracts, the value of land with quotas increases substantially. However, idle acres decrease in value.

Table 10--Impact of 100 percent of parity on land values, by commodities

Crop	Planted acres				Value per acre planted and idle 1/	
	Current		Parity		100 percent of parity	Percent increase
	1977/78					
	Acres	Value per acre	Acres	Value per acre 1/		
	Million	Dollars	Million	---Dollars---		Percent
Cotton	13.6	983	5.0	3,237	1,190	21
Corn	82.7	1,038	63.9	2,956	2,284	120
Sorghum, barley oats	45.4	464	36.7	1,206	975	110
Wheat	74.8	463	45.8	1,065	652	41
Soybeans	59.1	728	51.0	2,352	2,029	179
Rice	2.26	1,194	1.2	5,450	2,894	142
All crops	277.9	722	203.6	2,085	1,528	112

1/ Assuming 70 percent of net increase in returns is capitalized into land values at a rate of 5 percent through 1982.

Farm structure: Prices at 100 percent of parity slow the decline in farm numbers. There may be as many as 65,000 more farms in 1983 with parity prices than the current trend would indicate (table 11). However, inflated prices decrease the number of farms in sales classes III, IV, and V, moving these farms statistically into sale classes I and II (\$20,000 or more sales). But parity prices improve the viability of class VI farms. With parity, the number of smaller farms is expected to increase.

Table 11--Distributional effects of 100 percent of parity on total farm numbers

Sales class	1979	1980	1981	1982
Ia	+39,700	+ 67,800	+ 87,700	+105,100
Ib	+65,200	+116,000	+154,900	+189,800
II	+17,700	+ 26,800	+ 32,000	+ 36,700
III	-35,700	- 64,500	- 87,200	-107,800
IV	-40,400	- 72,600	- 97,800	-120,600
V	-40,500	- 70,900	- 93,400	-113,400
VI	+16,600	+ 35,000	+ 54,400	+ 75,800
Total farms	+22,600	+ 37,600	+ 50,600	+ 65,600

Mandating parity prices causes economic rent to occur in the farming sector. Economic rent is defined as the return to an inelastically supplied factor of production--such as land or a marketing quota--above the return required to keep it in its current use. The existence of economic rent attracts additional resources and would cause, over time, a shift of resources within agriculture.

Acreage adjustments: The combination of reduced domestic consumption and lower exports will mean acreage reductions for the major crops (table 12). These acreages meet anticipated domestic and export needs as well as provide sizeable increases in stocks levels of most grains for use in periods of low production--stocks which are owned and maintained by producers.

Table 12--Planted acreages required to meet domestic and foreign demand at parity prices

Crop	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83
			Mil. acres			
Wheat	74.8	66.0	48.8	45.3	44.9	45.8
Feed grains	128.1	126.6	105.0	100.0	101.3	100.6
Soybeans	59.1	65.0	51.0	51.0	50.5	51.0
Cotton	13.6	12.6	6.6	5.7	5.5	5.0
Total	275.6	270.2	211.4	202.0	202.2	202.4

These acreages are based on current production practices and assume producers idle acreage in order to bring production in line with quotas. An alternative adjustment would be to continue use of available acreage but adjust other inputs, fertilizer, pesticides, irrigation water, tillage, etc., and bring production in line with quotas through lower yields. In either case, the acreage comparisons give perspective to the level of idle capacity under parity prices compared with current output levels.

Impacts on landlords, tenants, and owner-operators: Slightly less than half of the crop acreages are operated by the landowner (table 13).

Table 13--Proportion of current crop acreage operated by owner-operators, share renters, and cash renters

Crop	Owner-operated	Share rented	Cash rented
	<u>Percent</u>		
Cotton	43	39	18
Corn	45	38	17
Sorghum	41	52	7
Barley	57	31	12
Oats	60	28	12
Wheat	49	40	11
Soybeans	42	40	18
Rice	49	44	7

Owner-operators will receive the full benefit of the higher parity based prices, but for about half of the acreages, there are tenant-landlord relationships. Where the relationship is on the share basis, the tenant and landlord will share the additional receipts generated by the higher prices. On a cash rent basis, the tenant would get the entire benefit of the higher prices, but the landowner would increase the cash rent as soon as possible given whatever agreement there is between the landlord and the cash renter.

Summary of per acre net returns received by an owner-operator, a landlord and a tenant is shown in tables 14 and 15 under prices and quantities consistent with 1978 target and loan prices and with October 1978 parity-based prices. The owner-operator returns and landlord returns are expressed as a percentage return to the current land value, the current land value being the same in both cases. Since share and cash renters do not own land, their returns are expressed in absolute dollar amounts. In general, a negative dollar return for the tenant is an indication that returns may not be sufficient for the tenant to be able to maintain capital equipment in the long run. A positive dollar return for the tenant provides a return to his management or a premium for his labor over and above the regular hired wage rate.

The results that are shown are indicative of the situation that would result if no adjustments were made in rental arrangements.

The comparisons at the parity price level are based on quota production, using quota levels that would be anticipated after about 3 years of the parity price program.

Table 14--Returns to owner-operators and landlords as a percent of 1978 land value 1/

Item	Owner-operator		Landlord		
			Cash rent	Share rent	
	Support <u>2/</u>	Parity <u>3/</u>	Support <u>2/</u> and parity <u>3/</u>	Support <u>2/</u>	Parity <u>3/</u>
	<u>Percent</u>				
Cotton	1.7	12.6	4.7	7.4	6.3
Corn	3.0	9.4	4.2	3.6	5.9
Sorghum	2.2	8.9	3.5	5.0	6.1
Barley	2.5	7.9	4.2	4.3	5.3
Oats	(-)	3.3	4.1	2.1	3.1
Wheat	2.7	8.4	4.4	3.6	4.7
Soybeans	1.8	9.1	4.1	2.8	5.6
Rice	6.4	21.2	---	5.2	7.5

1/ Returns above variable, machinery ownership and general farm overhead costs and land tax, 1978.

2/ 1978 target price or loan rate levels except soybeans at \$4.15 per bushel.

3/ Projected October 1978 parity price levels.

Table 15--Returns to tenants, 1978 1/

Item	Cash rent		Share rent	
	Support <u>2/</u>	Parity <u>3/</u>	Support <u>2/</u>	Parity <u>3/</u>
	<u>Dollars</u>			
Cotton	-20.26	177.34	-38.06	49.53
Corn	-16.83	119.81	- 7.77	52.07
Sorghum	- 6.13	47.64	-14.51	16.43
Barley	- 8.57	34.53	- 9.24	14.33
Oats	-33.31	2.05	-19.21	.89
Wheat	-10.83	54.11	- 5.58	24.71
Soybeans	-29.16	91.01	-11.72	43.30
Rice	---	---	14.29	162.06

1/ Returns above variable, machinery ownership and general farm overhead costs and landlord rent, 1978.

2/ 1978 target price or loan rate levels except soybeans at \$4.15 per bushel.

3/ Projected October 1978 parity price levels.

The return comparisons are indicative of tenure changes that would be likely under parity-based prices. In the short run, owner-operators and tenants receive a greater benefit than the landlord. Owner-operators, especially those who are established, are in a position to buy more land. Tenants who suddenly have greater returns are also likely to try to get into the land market. Their bidding against owner-operators and other investors who become aware of the higher agricultural returns accelerates the rate of increase in the price of land.

The landlord receives the least benefit relatively. Because of this, pressure exists to change the conditions of tenure. With parity-based prices and marketing quotas, returns are predictable and stabilized. This suggests that landowners likely will shift to cash rents and, in the longer run, cash rental rates increase and reduce the short-run advantage enjoyed by tenants. The share renter also loses his short-run advantage, but the adjustment is slower than for the cash renter.

Gross national product, inflation, and employment: Under a parity program, the GNP's annual growth rate is about half a percentage point less in 1979 and 1980 than under current programs. Measured in 1972 dollars, GNP is \$16 billion to \$30 billion less in each quarter during the first 2 years of a parity program.

Food price increases of about 20 percent, coupled with a projected increase in the CPI for all items less food of about 6 percent, imply an inflation rate of over 9 percent for the first year in which parity prices are established. After the initial adjustment to parity farm prices, food price increases for subsequent years correspond closely to average inflationary pressures in the general economy. Increases of around 6 percent per year are likely with both farm prices and marketing spreads contributing to the rise.

With 100 percent parity, unemployment rises modestly, but remains near current levels. This means that no new jobs are created for those who enter the labor force. Most job losses occur in industries which process or transport farm products. Of the estimated half million jobs lost by the end of 1979, over 100,000 jobs are lost because of reduced exports and the reduced demand for food containers.

Thus, the general economy is not stimulated under the full parity program, even though farmers receive substantially more income. The key reason is that the increase in income does not represent new money introduced to the economy--such as would result from deficit spending by the Federal Government. It is a redistribution of existing spending power from a very broad population base to a relatively small number of producer/consumer households.

Other factors are also at work. The multiplier effects that expand GNP when money is injected into the economy cause a contraction when income is concentrated in a relatively few hands. Transaction lags occur between the receipt of money and its spending when larger than normal sums are involved. This is because consumers and producers must analyze how to spend the additional funds. Also, the savings rate tends to increase as income rises, meaning that consumption does not rise proportionally with income.

Problems in Implementation

By raising farm prices to 100 percent of parity, economic forces are set in motion which run counter to a quota system based on historical patterns of production. These forces may be regarded as "distortions" to the effective, practical working of the pricing and quota system proposed by the AAM. Thus, they become problems for implementation of the proposed system. Some examples follow:

1. Farm prices set at 100 percent of parity, instead of market or support prices, lead to a new set of competitive relationships among crops on individual farms as well as regionally and nationally. Yet, producers are not free to respond to the new set of competitive relationships because of the quota system.
2. Also, new technology may give rise to a reduction in the cost of producing a particular crop relative to others. This added economic incentive to produce the crop cannot be fully considered by producers because of the quota system.
3. By moving livestock prices to 100 percent of parity, numbers of livestock would be far in excess of that needed to satisfy demand. There will be serious problems in adjusting livestock numbers downward, particularly during the transition period.
4. Parity pricing of cattle would provide the economic incentive for over expansion of the beef cow herd. Forages which are customarily produced on the cattle operation provide most of the feed for beef cows. With more land available for grazing, production costs for cow-calf operators probably would not increase very much, if any.
5. Livestock producers would produce more of their grains on their own farms. This could result in producers in the more efficient grain producing areas buying livestock marketing quotas from producers in other areas and expanding their operations. This could lead to a smaller number of the larger livestock operations.
6. Production of perishables in excess of quota would be a problem. Possible solutions would include delaying marketing (livestock), not harvesting (fruits and vegetables) or processing commodities so they can be stored (dried milk). In the last case, processed commodities would also have quotas so processing would allow storing for a future quota but would not allow immediate sales in another market.
7. Special procedures would be needed when assigning quotas to products that are produced and then used as inputs in production of another commodity such as feed. The major problem is to prevent a producer from marketing his quota and feeding production in excess of the quota.
8. The proposal is that quotas would be tied to the land or farm. This prevents new entry into commodity production or prevents producers from switching to alternative enterprises. In the longer run, the value of quotas will be capitalized into the land.
9. Grades and standards and marketing seasonality would require special attention. Quality and grade will have to be considered in setting parity prices and establishing quotas. Otherwise, producers would have no incentive to produce a particular class, variety or type that would be preferred by consumers and processors.

Additionally, the AAM proposal would considerably alter the U.S. position on matters in international bodies such as the General Agreement on Tariffs and Trade (GATT), the World Food Council, the International Wheat Agreement (IWA), and the International Sugar Agreement. In general, the proposal would run counter to the U.S. objective of reduced trade barriers under discussion in Geneva at the (GATT's) Multilateral Trade Negotiation. These proposals would also affect negotiations now underway in the International Wheat Council.

